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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,154	01/31/2002	Manfred Zesch	1109-112	8737

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EXAMINER

NERBUN, PETER P

ART UNIT	PAPER NUMBER
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3765

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DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/062,154

Applicant(s)

ZESCH ET AL.

Examiner

Peter P Nerbun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 21-34 and 54-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,9,10,12,13,20,35-40,43-45,47 and 51-53 is/are rejected.
- 7) ☒ Claim(s) 2-4,7,8,11,14-19,41,42,46 and 48-50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The information disclosure statement filed January 31, 2002 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because applicant has not provided the date of publication for the publications referred to as "8", "9", and "10". Each publication must be identified by publisher, author (if any), title, relevant pages of the publication, and date and place of publication. The date of publication supplied must include at least the month and year of publication, except that the year of publication (without the month) will be accepted if the applicant points out in the information disclosure statement that the year of publication is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the particular month of publication is not in issue. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,6,13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takiguchi et al. The patent to Takiguchi et al discloses a method for

stitching using a stitching apparatus comprising determining information related to at least a first stitch to be stitched using said stitching apparatus (by accessing the information pertaining to the pattern type using pattern selection device 14, Fig. 2 and microprocessor 13, obtaining tension data (using thread breakage detector 8, and controlling stitching using tension data (by detecting a broken thread using the tension data from thread breakage detector 8 to stop the drive motor thereby stopping (i.e. controlling) further stitching. The disclosure of Takiguchi et al does not explicitly state that stitching of the **first** stitch is controlled using the tension data (emphasis added). However the Takiguchi et al disclosure does state that if thread is broken during the time that the machine is running the detection signal representing the thread breakage is transmitted from the thread breakage detector 8 to the microprocessor 13. Takiguchi et al continues by stating that "At the same time the microprocessor provides the stop command signal to the motor driving circuit 18 and the drive motor 19 is stopped at once." (see col. 4, lines 3-6 and col. 4, lines 13-16 of the specification in Takiguchi et al). It would have been obvious to one of ordinary skill to control stitching of the first stitch using the tension data since the first stitch of Takiguchi et al is formed during a time when Takaguchi et al states that they may detect the broken thread using the tension data provided by the thread breakage detector 8. Clearly whenever Takiguchi et al may detect a broken thread using the tension data from thread breakage detector 8 (including a broken thread detected in the first stitch) they proceed to control stitching by stopping the drive motor thereby stopping (i.e. controlling) further stitching.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 35,43, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Takiguchi et al. The patent to Takiguchi et al discloses a stitching apparatus comprising at least a first thread, at least a first thread sensor 8, Fig. 2 that outputs information related to thread tension and a control 13 that controls at least said first thread using said information and includes at least a first controller.

Claims 1,5,6,9,10,12,35-40, and 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Conrad et al. The patent to Conrad et al discloses a method for stitching using a stitching apparatus 20, Fig. 1 comprising determining information related to at least a first stitch to be stitched using said stitching apparatus (Note that Conrad et al states that a "sensor detects, at all instances of time, during the cycle the

actual thread tension – see col. 8, lines 21-24. This detection “at all instances of time” as described by Conrad et al includes the time that the first stitch is formed), obtaining tension data (by storage of the thread tension in memory 806 – see col. 7, lines 55-58), and controlling stitching using tension data (the tension data is used in conjunction with predetermined tension values to control stitching by adjusting the thread tension of the stitches formed during the stitching process – see col. 8, lines 21-28). With regard to claims 36 note that a first thread is operably associated with a first active thread feeder 42, Fig. 6a activated by a motor 44, Fig. 1. With regard to claim 37 note that the belt and pulley mechanism connected between the drive motor 44 and drive rollers 40, 42 (see col. 5, lines 13-18) constitutes a “gear” operatively associated with the motor 44 since a gear is a mechanism that performs a specific function in a complete machine. The function in this instance is the transmission of mechanical energy from the motor to the drive rollers 40, 42.

Claims 35 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Hedman et al. The patent to Hedman et al discloses a stitching apparatus 20, Fig. 1 comprising at least a first thread, at least a first thread sensor 150a that outputs information related to thread tension and a control 34, 154 that controls at least said first thread using said information and includes at least a first controller. With regard to claim 44 note that the data related to thread tension is used in determining whether an upper thread break or a lower thread break has occurred. If an upper thread break has occurred status message 13 is displayed as described in col. 8, lines 45-46. If a lower

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thread break has occurred status message 42 is displayed as described in col. 8, lines 59-60.

Claims 35 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Willenbacher et al. The patent to Willenbacher et al discloses a stitching apparatus 1, Fig. 1 comprising at least a first thread, at least a first thread sensor 7, 8, Figs. 1, 2 that outputs information related to thread tension and a control 30, 38 that controls at least said first thread using said information and includes at least a first controller. With regard to claim 45 note that each of the first thread and first thread sensor is operatively associated with a thread contact element 5, 6, Fig. 2 that moves based on said thread tension.

Claims 2-4,7,8,11,14-19,41,42,46, and 48-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21-34 and 54-68 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

Applicant's election with traverse of the election of species requirement in Paper No. 3 is acknowledged. The traversal is on the ground(s) that "as a part of controlling stitching" (as set forth in species 1) "a thread feeder must be employed and is involved with automatically adjusting the thread feed based on desired tension data" (as set forth in species 3). This is not found persuasive because the control of stitching may be

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controlled through the application of an electromagnetic brake to stop the main drive motor of sewing machine in the event of a thread break. A brake mechanism of this kind does not require a thread feeder.

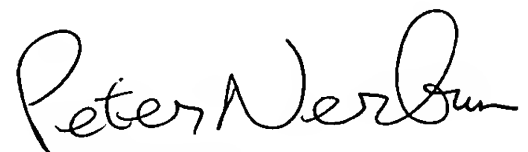
The requirement is still deemed proper and is therefore made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter P Nerbun whose telephone number is 703-308-0955. The examiner can normally be reached on M-F (1st Week) M-Th (2d Week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-308-0758.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

Peter Nerbun  
November 26, 2003

  
Peter Nerbun  
Primary Examiner